independent claims 1, 11 and 16 require at least the foregoing limitations, and all of applicant's claims 1-20 therefore include these limitations as well.

Rask, in contrast, is directed to a closed-loop fuel injection control method. In FIG. 1, Rask shows an ignition coil 32 having a secondary coil 34 having one end connected across an electrode gap of an ignition plug 5, and an opposite end connected to one end of a capacitor 40 that acts to bias the electrode gap with a substantially constant measuring voltage (see col. 4, lines 22-26). The opposite end of the capacitor 40 is connected to a resistor 42, wherein the current through the resistor 42 may be analyzed to detect "a knocking condition, pre-ignition or other condition" (see col. 4, lines 51-54; col. 6, lines 36-44). However, nowhere does Rask show or disclose a diagnostic circuit configured to produce an output signal having a pulse width that varies as a function of the ion current as required by applicant's claimed invention. Because Rask fails to show or disclose at least one limitation of each of applicant's independent claims, a § 102(b) rejection of applicant's claims is accordingly improper and withdrawal thereof is respectfully requested.

Rask does not appear to use ion current information for any diagnostic purposes, but rather appears to use the ion current information only in a closed-loop system for controlling ignition timing. Lacking any diagnostic circuitry processing the ion current information, Rask therefore cannot be said to teach or suggest applicant's claimed invention, and a § 103(a) rejection of applicant's claims based on Rask would likewise be improper.

Applicant has amended claim 3 to correct a grammatical error, and has traversed the rejection of claims 1-20. Applicant believes that claims 1-20 are now

in condition for allowance, and such action is solicited. The Examiner is invited to contact the undersigned by telephone to discuss any unresolved matters.

Respectfully submitted,

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Appendix A to R sponse to Office Action
Marked-up Version of Amended Claims Under 37 CFR § 1.12(c)(1)(ii)
Application Ser. No. 09/829,365

3. (Amended) The system of claim 1 wherein said diagnostic circuit is configured to produce said output signal with a pulse width indicative of a non-combustion event if said ion current flowing across said electrode gap is less than a second predefined amount of current.